

## **ABSTRACT**

**Author:** Martina Plšková

**Title:** Diagnostics of septic condition - blood culture. Comparison of costs of classic blood cultures and automated blood culture systems.

Bachelor's work

Charles University in Prague, Faculty of Pharmacy in Hradec Králové

**Field of study:** medical laboratory technician

**The aim of the study:** The aim of the study was to outline the issue of septic affections, to find out a percentage representation of bacterial species in positive blood cultures and to evaluate the costs of blood cultures processing.

**Methods:** Economical comparison of two methods of blood cultures processing – the traditional manual method and the automated blood culture system Bactec 9050.

**Results:** The result of the examination was that samples processing using the automated blood culture system Bactec 9050 is beneficial not only from the economical point of view and that the representation of bacterial species in positive blood cultures is consistent with the results of other authors.

**Conclusions:** Automated blood culture systems bring improvement of diagnostics of septic affections and accelerated identification of bacterial agents. This is important for early initiation of antibiotic therapy.